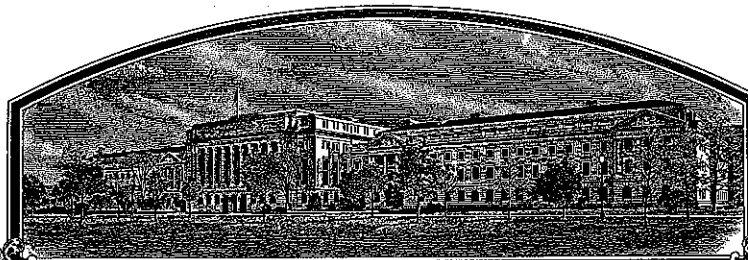


No.

200700365



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE HERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR SELLING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'SENG 9171'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this second day of October, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

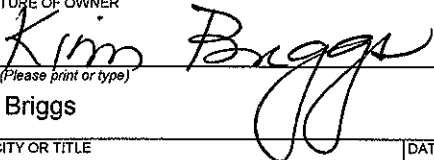
Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Syngenta Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	3. VARIETY NAME SENG 9171
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 600 North Armstrong Place Boise, ID 83704		5. TELEPHONE (include area code) 208-465-8522	<div>FOR OFFICIAL USE ONLY</div> <div>PVPO NUMBER #200700365</div> <div>FILING DATE July 6, 2007</div>
		6. FAX (include area code) 208-467-4559	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware	9. DATE OF INCORPORATION 02/25/1975	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Kim Briggs c/o Syngenta Seeds, Inc. 6338 Highway 20-26 Nampa, ID 83687			<div>FILING AND EXAMINATION FEES: \$4382.00</div> <div>DATE 07-06-2007</div> <div>CERTIFICATION FEE: \$768.00</div> <div>DATE Aug 21, 2008</div>
11. TELEPHONE (Include area code) 208-465-8522	12. FAX (Include area code) 208-467-4559	13. E-MAIL kim.briggs@syngenta.com	
14. CROP KIND (Common Name) Tomato	16. FAMILY NAME (Botanical) Solanacea	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Lycopersicon	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input checked="" type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Kim Briggs		NAME (Please print or type)	
CAPACITY OR TITLE PVP Specialist	DATE June 27, 2007	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVPOMail@usda.gov
Homepage: <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

#200700365

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Hybrid Tvt020 was sold to Keithly-Williams in Mexico on 9-18-2006.

24. CONTINUED FROM FRONT (Please give the country, date of filing of issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Plant Variety Protection

Exhibit A Origin and Breeding History

SENG 9171

In 1999, Syngenta started a program to introduce resistance to Fusarium wilt race 3 to the tomato breeding program.

The breeding selection was pedigree selection

In our station in Florida an F2 segregating population of Sunguard was planted. Sunguard is a variety from Siegers Seeds and is well known for its resistance to Fus.3.

- In June 1999 from this F2 segregating population, 15 plants were selected and the seeds were sent to our Pathology service in Naples for testing.
- In March 2000, the F3's were planted (25 plants each). The plants selected were resistant to Fus. 3. In this population, 3 plants were selected for good agronomical value.
- In October 2000, the 3 F4's were planted (15 plants each) and 3 plants were selected by for good agronomical value.
- In April 2001, 3 F5's were planted (10 plants each) and two selections were done and seeds were sent to pathology department in Naples to confirm the resistance to Fus.3, and a seed sample was also sent to Spain.
- In January 2002, 2 F6's were planted (10 plants each) in our station of El Ejido.Spain, and one of the plants was selected due to good agronomical value and adaptation to local conditions.
- In June 2002, the F7's were planted (20 plants) in our El Ejido, Spain station where uniformity and stability were observed. The harvested seeds were sent to Holland for production.

SENG 9171 was observed for stability during 3 cycles; one in Spain and two in Holland. The variety proved uniform and stable within commercially acceptable limits. A small percentage of variants can occur, as with other tomato varieties, within commercial acceptance limits. However no variants were observed during the three cycles in which the variety was observed to be uniform and stable.

#200700365

Exhibit B
Statement of Distinctness

SENG 9171

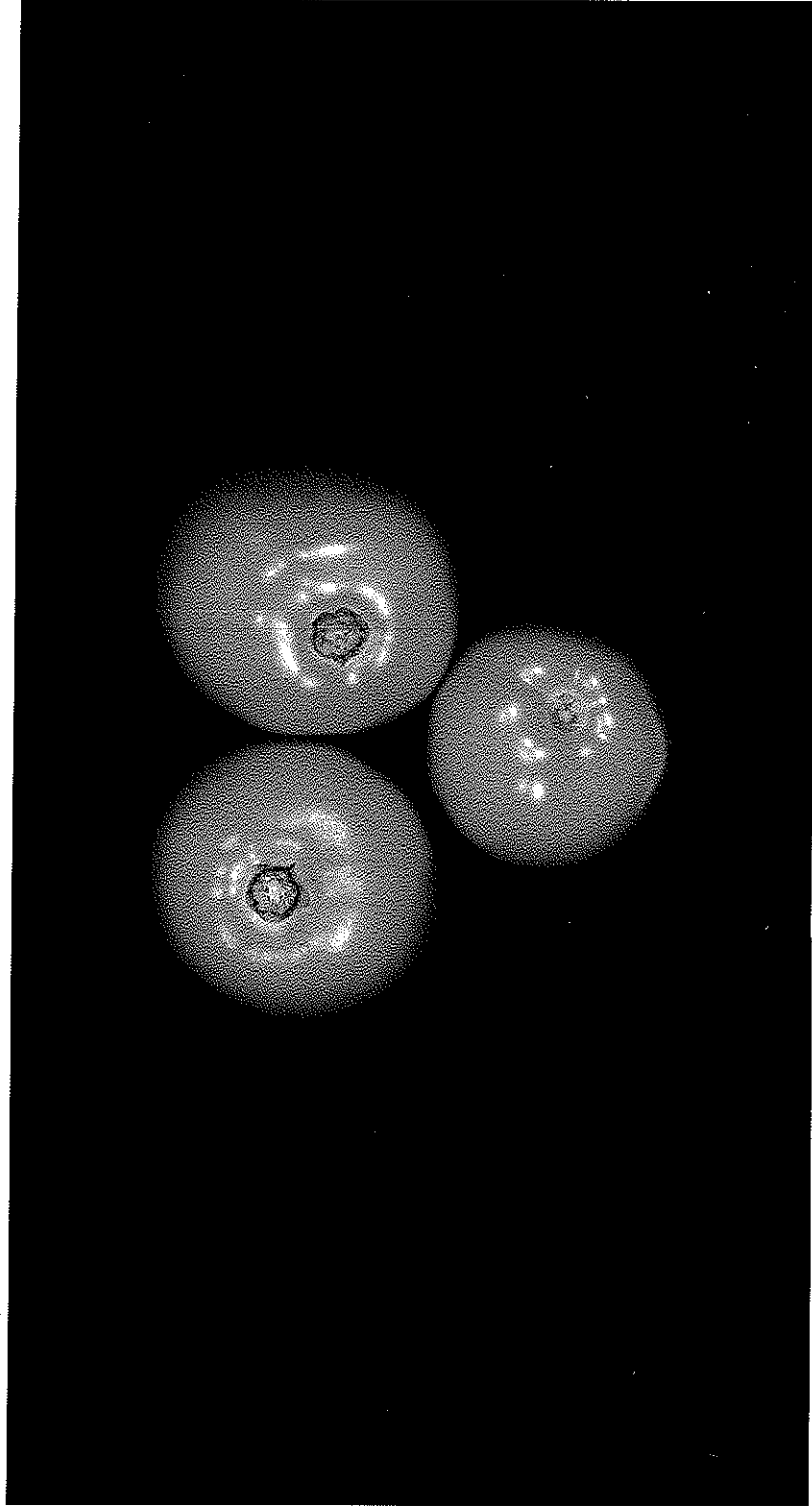
SENG 9171 is described as a parent line to produce Fresh market tomato hybrids. The novelty of SENG 9171 is improved fruit firmness over standard Fresh Market breeding lines while retaining Fusarium race 3 resistance, as well as improved fruit shoulder smoothness.

The most similar variety is 'Sunguard', but the characteristics that most distinguish the two varieties, but maybe not limited to, are:

- SENG 9171 retains the Fusarium race 3 resistance in combination with improved fruit firmness at red stage over Sunguard.
- SENG 9171 fruit shoulders are smoother than Sunguard. SENG 9171 fruit shape is globe to deep globe. Sunguard tends to be flattened globe to globe in shape with rough shoulders.

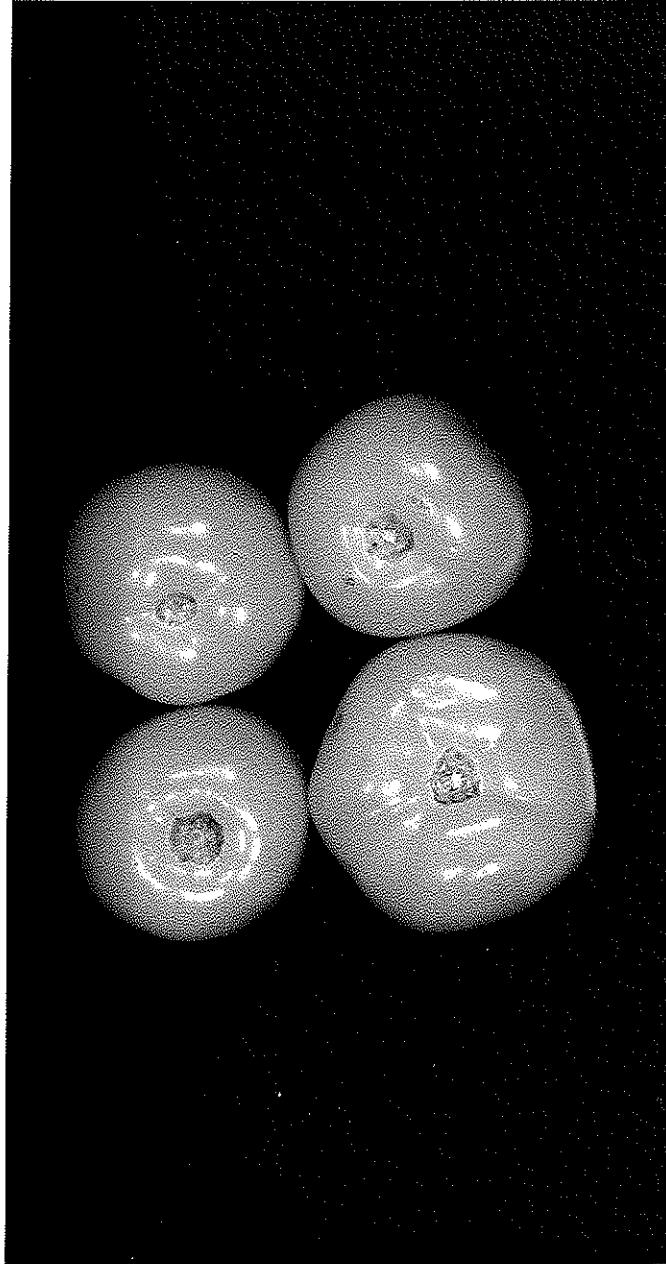
SENG 9171 sister line

#200700365



'Sunguard'

#200700365



#200700365

SUNGUARD-I



SENG 9171-I



#200700365

SUNGUARD-II



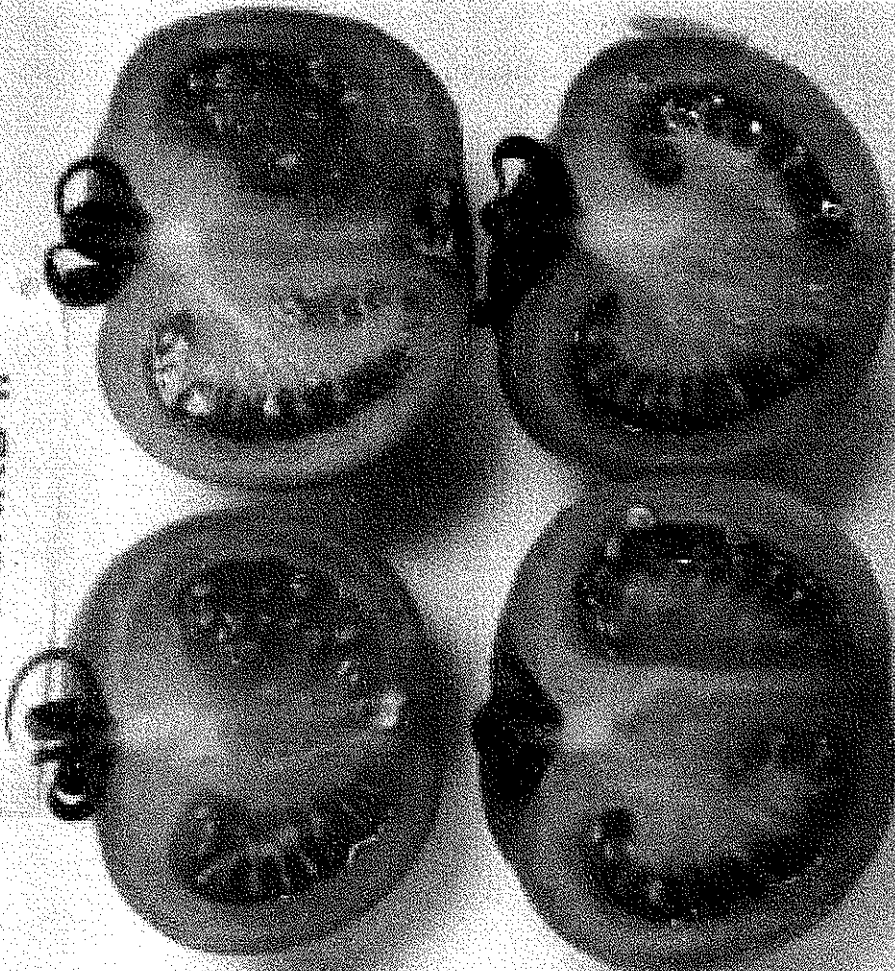
SENG 9171-II



#200700365

SUNGUARD-II

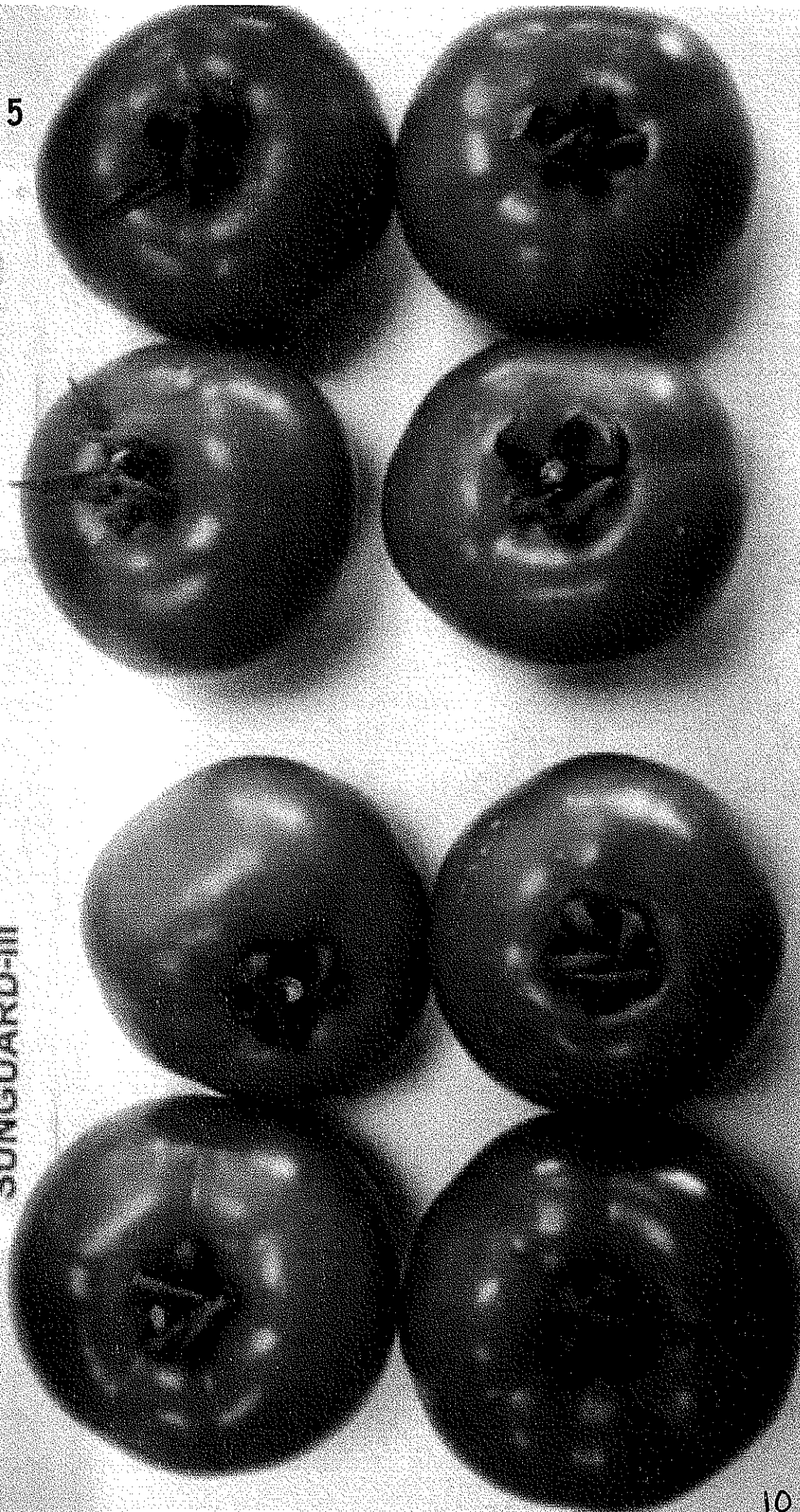
SENG 9171-II



#200700365

SENG 9171-III

SUNGUARD-III



#200700365

SENQ 9171-III

SUNGUARD-III

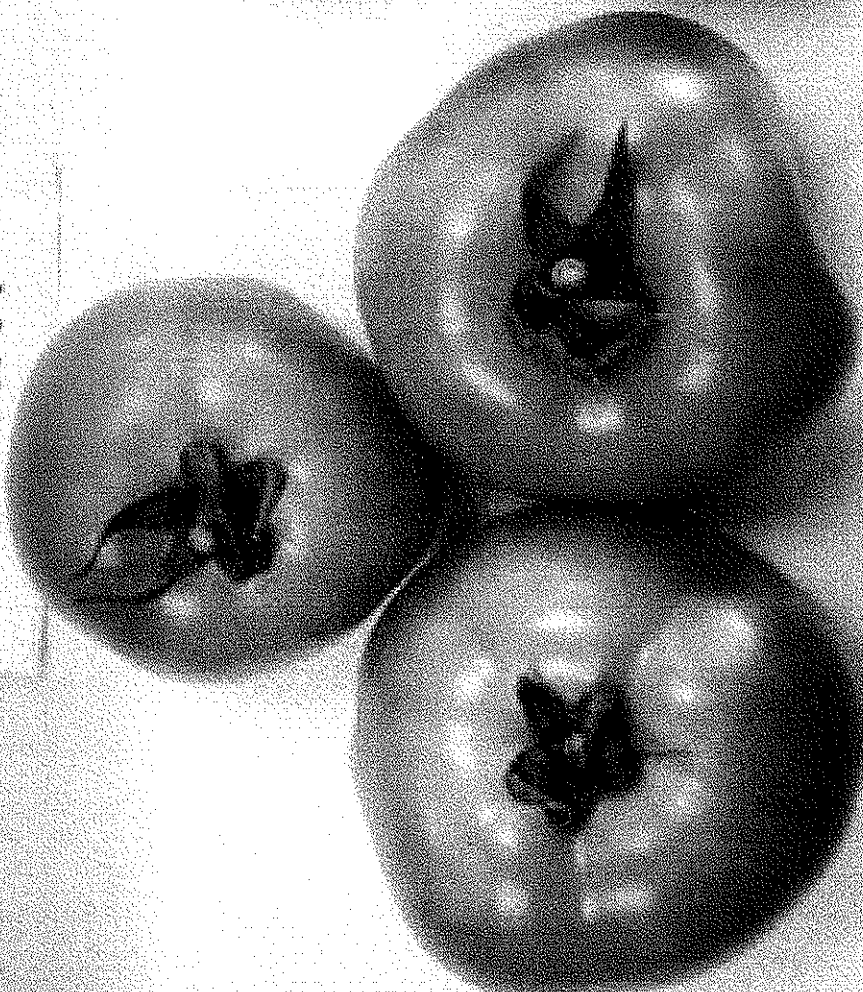


#200700365

SUNGUARD-I



SENG 9171-I



#200700365



Rep I - Fusarium 3 test

#200700365



Rep I Fusarium 3 test

#200700365



Rep II - Fusarium 3 Test
SENG 9171
PVP No.: 200700365
Rep II - Photo I

Filename: SENG9171 Rep 2 Photo 1

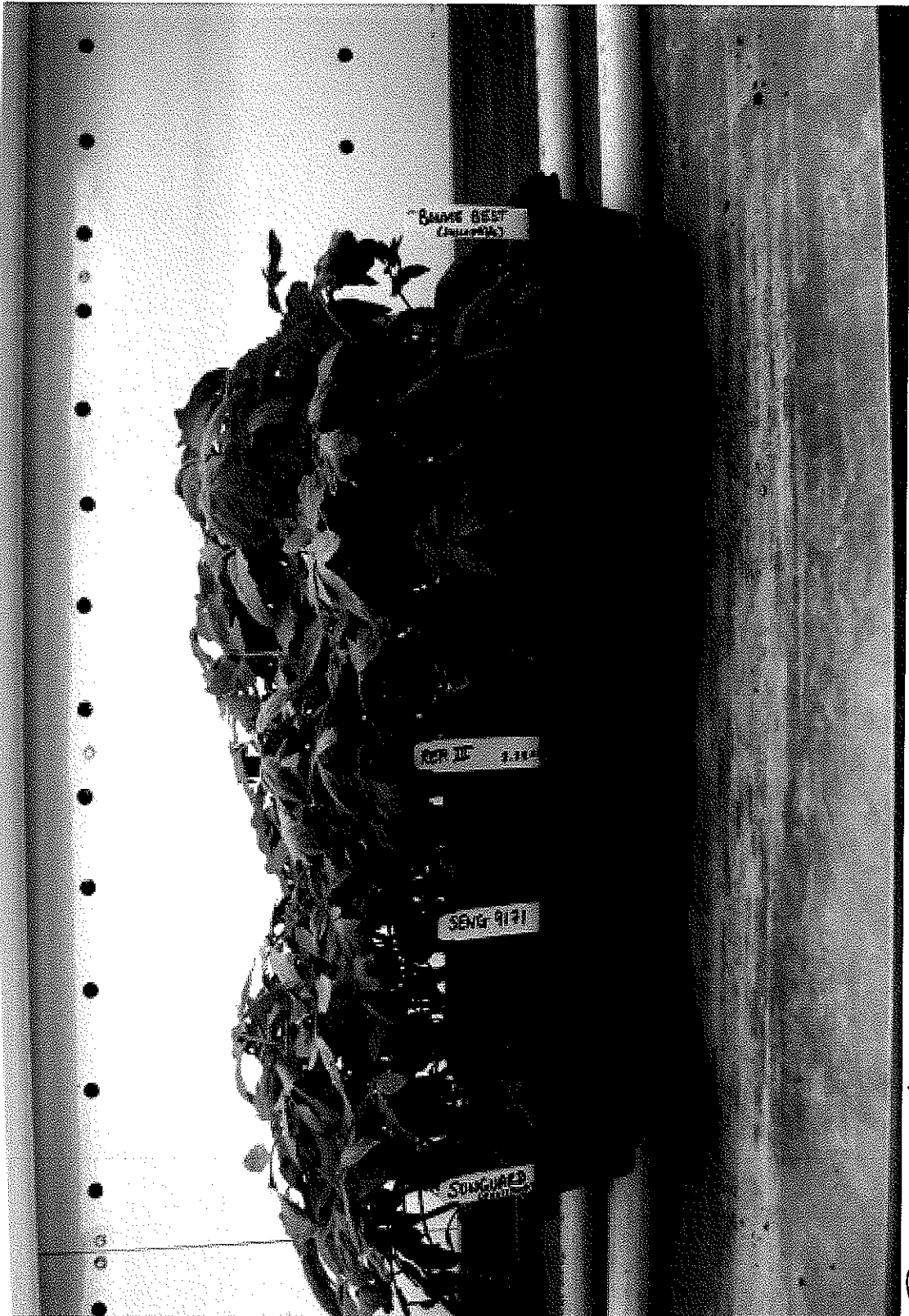
#200700365



Rep II - Fusarium 3 Test
SENG 9171
PVP No. 200700365

Rep II - Photo 2

#200700365



Rep III - Fusarium 3 Test

SENG 9171 PVP No.: 200700365

Rep 3 - Photo 1

#200700365



Rep III - Fusarium 3 Test; SENG 9171; PVP No.: 200700365 (Rep 3, Photo 2)

Filename: SENG 9171 Rep 3 Photo 2

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY
TOMATO (*Lycopersicon esculentum*)

NAME OF APPLICANT (S) <i>Syngenta Seeds, Inc.</i>	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME PZ692 <i>SENG 9171</i>
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) SYNGENTA SEEDS <i>600 North Armstrong Pl. Boise, ID 83704</i>	FOR OFFICIAL USE ONLY	
		PVPO NUMBER <i>#200700365</i>

Choose responses for the following characters which best fit your variety. Complete this form as fully as possible for best characterization of the variety. When a single quantitative value is requested (e.g., fruit weight), your answer should be the mean of an adequate-sized, unbiased sample of plants. Use leading zeros when necessary (e.g., 0.2 or 0.8, etc.). The applicant variety should be compared with at least one well-known standard check variety of the same type (see list of recommended check varieties below), and grown in the same trials. The characters on this form should be described from plants grown under normal conditions of culture for the variety. Indicated by check whether trial data are from greenhouse or field ___ planting. Trials direct-seeded ___ or transplanted ~~staked~~ ___ or unstaked ___. Give locations and dates of seeding and transplanting here: *Seeding - January 2006*

Transplant - February 2006
Almeria, Spain

COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VARIETIES IN THE FOLLOWING LIST. IF AT ALL POSSIBLE, ENTER THE NUMBER OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUESTED.

1 = Ace 55 VF
2 = Campbell 37
3 = Chico III
4 = Flora Dade
5 = Florida MH-1
6 = Heinz 1350

7 = Homestead 24
8 = Marglobe
9 = Murietta
10 = New Yorker
11 = Ohio MR-13
12 = Red Cherry Large

13 = Red Rock
14 = Roma VF
15 = Rutgers
16 = Sunray
17 = Tropic
18 = UC 82

19 = VF 134
20 = US 28
21 = VF 145 B 7879
22 = Other (Specify) *DANIELA*
23 = Other (Specify) _____
24 = Other (specify) _____

1. SEEDLING

2 Anthocyanin in hypocotyl of 2 - 15 cm seedling: 1 = Absent 2 = Present

1 Habit of 3 - 4 week old seedling: 1 = Normal 2 = Compact

2. MATURE PLANT (at maximum vegetative development)

1 7 0 cm Height

2 Growth: 1 = Indeterminate 2 = Determinate

2 Form: 1 = Lax, open 2 = Normal 3 = Compact 4 = Dwarf 5 = Brachytic

2 Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large

1 Habit: 1 = Sprawling (decumbent) 2 = Semi-Erect 3 = Erect ('Dwarf Champion')

#200700365

3. STEM

- 2 Branching: 1 = Sparse ('Brehm's Solid Red', 'Fireball') 2 = Intermediate ('Westover') 3 = Profuse ('UC 82')
- 1 Branching at cotyledonary or first leafy node: 1 = Present 2 = Absent
- 3 No. of nodes between first inflorescences: 1 = 1-4 2 = 4-7 3 = 7-10 4 = 10 or more
- 2 No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescences. 2 No. of nodes between later developing inflorescences.
- 3 Pubescence on younger stems: 1 = Smooth (no long hairs) 2 = Sparsely hairy (scattered long hairs) 3 = Moderately hairy 4 = Densely hairy or wooly

4. LEAF (mature leaf beneath the 3rd inflorescences)

- 1 Type: 1 = Tomato 2 = Potato ('Trip-L-Crop') 1 Morphology (choose illustration at the end of this form that is most similar)
- 2 Margins of major leaflets: 1 = Nearly entire 2 = Shallowly toothed or scalloped 3 = Deeply toothed or cut, sps. Toward base
- 1 Marginal rolling or wiltiness: 1 = Absent 2 = Slight 3 = Moderate 4 = Strong
- 2 Onset of leaflet rolling: 1 = Early-Season 2 = Mid-Season 3 = Late Season
- 1 Surface of major leaflets: 1 = Smooth 2 = Rugose (bumpy or veiny)
- 2 Pubescence: 1 = Smooth (no long hairs) 2 = Normal 3 = Hirsute 4 = Wooly

5. INFLORESCENCE (make observations on 3rd inflorescence)

- 1 Type: 1 = Simple 2 = Forked (2 major axes) 3 = Compound (much branched)
- 0 5 Number of flowers in inflorescence. Average
- 1 Leafy or "running" inflorescences: 1 = Absent 2 = Occasional 3 = Frequent

6. FLOWER

- 1 Calyx: 1 = Normal, lobes awl-shaped 2 = Macrocalyx, lobes large, leaflike 3 = Fleshy
- 2 Calyx-lobes: 1 = Shorter than corolla 2 = Approx. equalling corolla 3 = Distinctly longer than corolla
- 1 Corolla color: 1 = Yellow 2 = Old Gold 3 = White or Tan
- 2 Style pubescence: 1 = Absent 2 = Sparse 3 = Dense
- 1 Anthers: 1 = All fused into tube 2 = Separating into 2 or more groups at anthesis
- 1 Fasciation (1st flower of 2nd or 3rd inflorescence): 1 = Absent 2 = Occasionally present 3 = Frequently present

7. FRUIT (3rd fruit of 2nd or 3rd cluster) For the first 5 characters below, match your variety with the most similar illustration on pages at the end of this form.

- 2 Typical fruit shape 1 Shape of transverse section 2 Shape of stem end
- 2 Shape of blossom end 4 Shape of pistil scar
- 1 Abscission layer: 1 = Present (pedicellate) 2 = Absent (jointless)
- 1 Point of detachment of fruit at harvest: 1 = At pedicel joint 2 = At calyx attachment
- 1 0 mm Length of pedicel (from joint to calyx attachment)
- 0 4 8 mm Length of mature fruit (stem axis) 0 5 3 mm Length, check var. no. 2 2
- 0 6 2 mm Diameter of fruit at widest point 0 6 6 mm Diameter, check var. no. 2 2
- 1 8 7 g Weight of mature fruit 1 4 0 g Weight, check var. no. 2 2
- 3 No. of locules: 1 = Two 2 = Three and four 3 = Five or more
- 2 Fruit surface: 1 = Smooth 2 = Slightly rough 3 = Moderately rough or ribbed
- 3 Fruit base color (mature-green stage):
1 = Light Green ('Lanai', 'VF 145-F5') 2 = Light Gray-Green 3 = Apple or Medium Green ('Heinz 1439 VF') 4 = Yellow Green 5 = Dark Green
- 1 Fruit Pattern (mature-green stage): 1 = Uniform Green 2 = Green-Shouldered 3 = Radial Stripes on Sides of Fruit

7. FRUIT (continued)

#200700365

- ___ Shoulder color if different from base: 1 = Dark Green 2 = Grey Green 3 = Yellow Green
- 5 Fruit color, full-ripe: 1 = White 2 = Yellow 3 = Orange 4 = Pink 5 = Red 6 = Brownish 7 = Greenish 8 = Other (specify) _____
- 3 Flesh color, full-ripe: 1 = Yellow 2 = Pink 3 = Red/Crimson 4 = Orange 5 = Other (specify) _____
- 1 Flesh color: 1 = Uniform 2 = With lighter and darker areas in walls
- 3 Locular gel color of table-ripe fruit: 1 = Green 2 = Yellow 3 = Red
- 2 Ripening: 1 = Blossom-to-stem end 2 = Uniform
- 1 Ripening: 1 = Inside out 2 = Uniformly 3 = Outside in
- 2 Stem scar size: 1 = Small ('Roma') 2 = Medium ('Rutgers') 3 = Large
- 2 Core: 1 = Coreless (absent or smaller than 6x6 mm) 2 = Present
- 2 Epidermis color: 1 = Colorless 2 = Yellow
- 1 Epidermis: 1 = Normal 2 = Easy-peel
- 2 Epidermis texture: 1 = Tender 2 = Average 3 = Tough
- ___ Thickness of pericarp _____ Thickness of pericarp. Check var. no. _____
- 2 Anthocyanin in hypocotyl of 2 - 15 mc seedling: 1 = Absent 2 = Present 1 Habit of 3 - 4 week old seedling: 1 = Normal 2 = Compact

8. RESISTANCE TO FRUIT DISORDER (Use code: 0 = Unknown 1 = Susceptible 2 = Resistant)

- | | | | |
|---------------------------|-------------------------------|---------------------|---------------------------|
| <u>2</u> Blossom end rot | <u>2</u> Catface | <u>2</u> Fruit pox | <u>2</u> Zippering |
| <u>2</u> Blotchy ripening | <u>0</u> Cracking, concentric | <u>2</u> Gold fleck | ___ Other (specify) _____ |
| <u>2</u> Bursting | <u>0</u> Cracking, radial | <u>2</u> Graywall | |

9. DISEASE AND PEST REACTION (Use code: 0 = Unknown 1 = Susceptible 2 = Resistant) NOTE: If claim of novelty is based wholly or in substantial part upon disease resistance, trial data should be appended. These should specify the method of testing, the reaction of the application variety, and reaction of well-known check varieties grown in the trial (identified by name).

Viral Diseases:

- | | | |
|---------------------------------|---------------------------------|--|
| ___ Cucumber mosaic | <u>1</u> Tobacco mosaic, Race 0 | <u>1</u> Tobacco mosaic, Race 2 ² |
| ___ Curly top | <u>1</u> Tobacco mosaic, Race 1 | <u>1</u> Tomato spotted wilt |
| ___ Potato-Y virus | <u>1</u> Tobacco mosaic, Race 2 | ___ Tomato yellows |
| ___ Blotchy ripening | ___ Cracking, concentric | ___ Gold fleck |
| ___ Other virus (specify) _____ | | |

Bacterial Diseases:

- | | |
|--|--|
| ___ Bacterial canker (<i>Corynebacterium michiganense</i>) | ___ Bacterial spot (<i>Xanthomonas vesicatorum</i>) |
| ___ Bacterial soft rot (<i>Erwinia carotovora</i>) | ___ Bacterial wilt (<i>Pseudomonas solanacearum</i>) |
| ___ Bacterial speck (<i>Pseudomonas tomato</i>) | ___ Other bacterial disease (specify) _____ |

Fungal Diseases:

- | | |
|---|---|
| ___ Anthracnose (<i>Colletotrichum</i> spp.) | ___ Leaf mold, Race 1 (<i>Cladosporium fulvum</i>) |
| ___ Brown root rot or corky root (<i>Pyrenochaeta lycopersici</i>) | ___ Leaf mold, Race 2 |
| ___ Collar rot or stem canker (<i>Alternaria solani</i>) | ___ Leaf mold, Race 3 |
| ___ Early blight defoliation (<i>Alternaria solani</i>) | ___ Leaf mold, other races (specify) _____ |
| <u>2</u> Fusarium wilt, Race 1 (<i>F. oxysporum f. lycopersici</i>) | ___ Nailhead spot (<i>Alternaria tomato</i>) |
| <u>2</u> Fusarium wilt, Race 2 | ___ Sclerotinia leafspot (<i>S. lycopersici</i>) |
| <u>2</u> Fusarium wilt, Race 3 | ___ Target leafspot (<i>Corynespora cassiicola</i>) |

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9. DISEASE AND PEST REACTION (continued)

Fungal Diseases:

- 2 Gray leaf spot (*Stemphylium* spp.) 2 Verticillium wilt, Race 1 (*V. albo-atrum*)
 ___ Late blight, Race 0 (*Phytophthora infestans*) 2 Verticillium wilt Race 2
 ___ Late blight, Race 1 ___ Other fungal disease (specify) _____

Insects and Pests:

- ___ Colorado potato beetle (*Leptinotarsa decemlineata*) ___ Tomato hornworm (*Manduca quinquemaculata*)
1 Southern root knot nematode (*Meloidogyne incognita*) ___ Tomato fruitworm (*Heliothis zea*)
 ___ Spider mites (*Tetranychus* spp.) ___ Whitefly (*Trialeurodes vaporariorum*)
 ___ Sugar beet army worm (*Spodoptera exigua*) ___ Other (specify) _____
 ___ Tobacco flea beetle (*Epitrix hirtipennis*)

Pollutants:

- ___ Ozone ___ Sulfur dioxide ___ Other (specify) _____

10. CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS Suggested test methods may be found in "Tomato Products", 5th ed., National Canners Assn. Bull. 27-L. Please specify test methods or give a reference to methods used. Fill in table below with values for the new variety and for at least one well-known check variety of similar type grown in the same trial. Specify names or numbers of check varieties.

	Submitted Variety	Check Variety	Check Variety	Check Variety
pH				
Titrate acidity, as % citric				
Total solids (dry matter, seeds and skin removed)				
Soluble solids as °Brix				

11. PHENOLOGY Express length of developmental stages either as calendar days or as heat units (growing degree days), in degrees Celsius. If heat units are used, indicate the base temperature used in their calculation in _____°C. See paper by Warnock under "References" for method. Give comparative data for at least one check variety; identify checks by name or by number from table on page 1.

	Application Variety	Check Variety	Check Variety	Check Variety
Seeding to 50% flow (1 open on 50% of plants)				
Seed to once over harvest (if applicable)				

- ___ Fruiting season: 1 = Long ('Marglobe') 2 = Medium ('Westover') 3 = Short, concentrated ('VF 145') 4 = Very concentrated ('UC 82')
 ___ Relative maturity in areas tested: 1 = Early 2 = Medium early 3 = Medium 4 = Medium late 5 = Late 6 = Variable
 (If relative maturity is known to differ by location or environment, please explain on separate sheet)

12. ADAPTATION If more than one category applies, list all in rank order.

- 1 Culture: 1 = Field 2 = Greenhouse
 ___ 2 Principle use(s): 1 = Home garden 2 = Fresh market 3 = Whole-pack canning 4 = Concentrated products
 5 = Other (specify) _____
1 Machine harvest: 1 = Not adapted 2 = Adapted

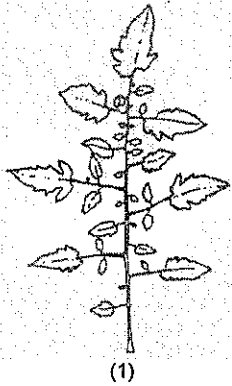
- 4 Regions to which adaptation has been demonstrated:
 1 = Northeast 2 = Mid Atlantic 3 = Southeast 4 = Florida 5 = Great Plains
 6 = South-central 7 = Intermountain West 8 = Northwest 9 = California: Sacramento and Upper San Joaquin Valley
 10 = California: Coastal Areas 11 = California: Southern San Joaquin Valley & Deserts

ILLUSTRATIONS OF TOMATO LEAF AND FRUIT CHARACTERISTICS

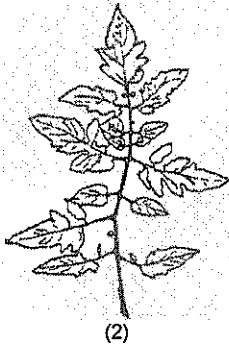
4. LEAF

Morphology:

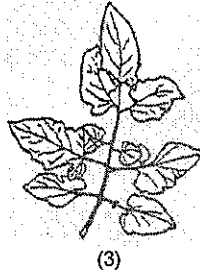
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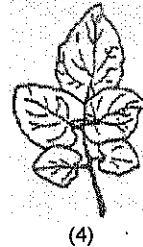
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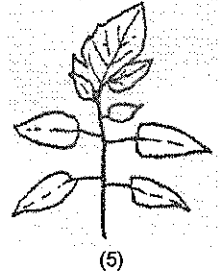
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(3)



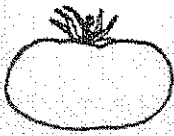
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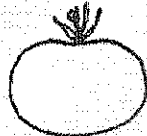
(5)

7. FRUIT

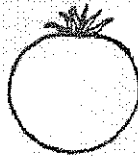
Typical fruit shape:



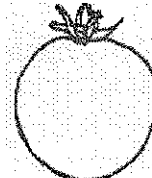
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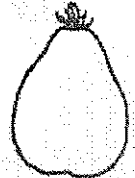
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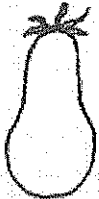
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(4)



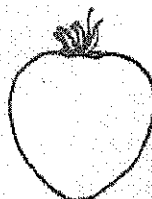
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(6)



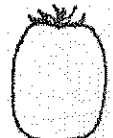
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(8)

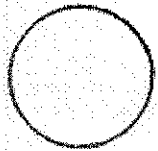


(9)



(10)

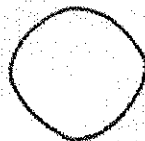
Shape of transverse section:



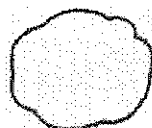
1 = Round



2 = Flattened



3 = Angular

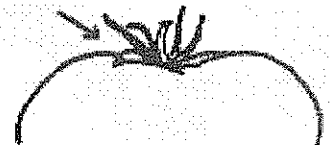


4 = Irregular

Shape of stem end:

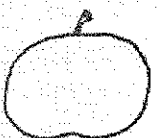


1 = Flat

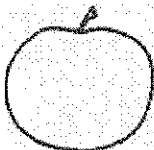


2 = Indented

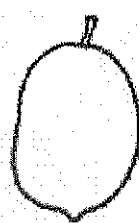
Shape of blossom end:



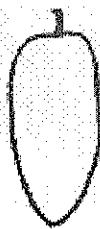
1 = Indented



2 = Flat

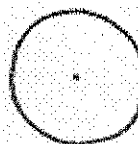


3 = Nipped

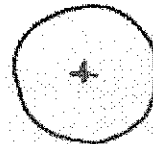


4 = Tapered

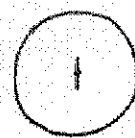
Shape of pistil scar:



1 = Dot



2 = Stellate



3 = Linear



4 = Irregular

REFERENCES

#200700365

- Anonymous, 1976. All About Tomatoes. Ortho Books, Chevron Chemical Co., San Francisco. In three volumes: Midwest/Northeast Edition, West Edition, and South Edition.
- Ware, G.W. & J.P. McCollum, 1968. Producing Vegetable Crops. The Interstate Printer & Publishers, Inc., Danville, Illinois. Chapter 30, pp. 451-473, "Tomatoes".
- Warnock, S.J. 1978. Using Tomato Heat Units. Leaflet No. 6, Campbell Institute for Agricultural Research, Camden, NJ. 10 p.
- Webb, R.E., T.H. Barksdale, & A.K. Stoner, 1973. "Tomatoes", pp. 344-361, in: Nelson, R.R. (Ed.), Breeding Plants for Disease Resistance. Pennsylvania State University Press, University Park.
- Young, P.A. & J.W. MacArthur, 1947. Horticultural characters of tomatoes. Bull. Texas Agric. Exper. Station No. 698.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Syngenta Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME SENG 9171
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 600 North Armstrong Place Boise, ID 83704	5. TELEPHONE (Include area code) 208-465-8522	6. FAX (Include area code) 208-467-4559
7. PVPO NUMBER #200700365		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

SENG 9171 was bred and developed by plant breeders employed by Syngenta Seeds, Inc. By agreement between the employee and Syngenta Seeds, Inc., all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds were assigned to Syngenta Seeds, Inc., with no rights retained by the employee.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION
Syngenta Seeds, Inc.	600 N. Armstrong Pl. Boise, ID 83704	VARIETY NAME SENG 9171
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE ONLY
Kim Briggs	6338 Highway 20-26 Nampa, ID 83687	PVPO NUMBER #200700365

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Kim Briggs
Signature

6-27-2007
Date